

**REMARKS**

This is a full and timely response to the Office Action mailed March 4, 2005, submitted concurrently with a three month extension of time to extend the due date for response to September 4, 2005.

By this Amendment, claims 2 and 8 have been amended to delete the term “*fine*”. Support for the claim amendments can be found variously throughout the specification and the original claims. Thus, claims 2-8 are pending in this application, with claims 4-7 being withdrawn.

In view of this Amendment, Applicant requests favorable reexamination and reconsideration in light of the above amendments and the following remarks.

**Rejection under 35 U.S.C. §112**

Claim 8 is rejected under 35 U.S.C. §112, second paragraph, for alleged indefiniteness. Applicant respectfully traverses this rejection. However, in the interest of expediting the allowance of the present application, Applicant has deleted the term “*fine*” from the claims as per the Examiner’s suggestion.

**Rejection under 35 U.S.C. §103**

Claims 2, 3 and 8 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over Yukinobu et al. (U.S. Patent No. 5,411,792) in view of Sumitomo Cement KK (JP 06-087631-A). Applicant respectfully traverses this rejection.

To establish a *prima facie* case of obviousness, the cited references, in combination, must teach or suggest the invention as a whole, including all the limitations of the claims. Here, in this case, the combination of Yukinobu et al. and Sumitomo Cement KK fails to teach or suggest the claimed limitation “*a compressed layer on a support, said compressed layer having conductive particles and a resin, said resin being approximately 0.03-9.3 parts by volume with respect to 100 parts by volume of said conductive particles, said compressed layer formed by compressing the conductive particles and the resin on the support with a compression force of at least 44N/mm<sup>2</sup>*”. In particular, the combination of Yukinobu et al. and Sumitomo Cement KK fails to teach or suggest the specific claimed limitations “*said resin being approximately 0.03-9.3 parts by volume with respect to 100 parts by volume of said conductive particles*” and “*said compressed layer formed by compressing the conductive particles and the resin on the support*”

*with a compression force of at least 44N/mm<sup>2</sup>*”.

Sumitomo Cement KK discloses in paragraph [0007] that “*said high conductivity layer is formed by the conductive paint whose rate of the transparent conductive filler in said content is 62.5-100 wt%*”. In other words, the resin may be contained in an amount of 0 to 37.5 wt% in the conductive paint. This resin amount of 0 to 37.5 wt% in Sumitomo Cement KK corresponds, as represented by volume, a much broader range of 0-296 parts by volume with respect to 100 parts by volume of the conductive particles, as shown below.

The specific gravity of tin-doped indium oxide (i.e. ITO) as conductive particles is in a range of 6.9-7.1, and the specific gravity of the resin is in a range of 1.2-1.4. Therefore, Applicant calculated using 6.9 as the specific gravity of ITO, and 1.4 as the specific gravity of the resin, to obtain the possible minimum volume value of the resin with respect to the possible maximum volume of ITO.

From 62.5 wt% of ITO, 9.06 volume of ITO is calculated (i.e. 62.5/6.9).

From 37.5 wt% of the resin, 26.8 volume of the resin is calculated (i.e. 37.5/1.4).

From these values, the resin amount of 37.5 wt% is calculated as 296 parts by volume with respect to 100 parts by volume of ITO (i.e.  $26.8 \times 100/9.06 = 296$ )

Thus, it is clear that Sumitomo Cement KK only teaches a much broader resin amount range of 0-296 parts by volume with respect to 100 parts by volume of conductive particles than that of the present invention, and never discloses the presently claimed resin amount range of “*0.03-9.3 parts by volume*”.

The Examiner also argues that Sumitomo Cement KK’s teaching of “62.5-100 wt% of conductive particles” can be combined with Yukinobu et al.’s teaching of compressed layer. However, Applicant strongly disagrees with the Examiner in this regard.

Under U.S. practice, a *prima facie* case of obviousness can only be established if there is some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)

Sumitomo Cement KK cannot be modified or combined with Yukinobu et al. to direct to a compressed conductive layer since such modification or combination renders the transparent electroconductive film of Sumitomo Cement KK unsatisfactory for its intended

purpose. Sumitomo Cement KK never teaches or suggests compressed conductive layer formed by compressing the conductive particles because the reinforced layer on the high conductivity layer in Sumitomo Cement KK is indispensable for fixing the transparent conductive filler in the high conductivity layer to the glass substrate, and for obtaining the high conductivity (please see paragraphs [0018], [0019], and [0027] of Sumitomo Cement KK). This is further demonstrated in “Example 2 of a comparison” (please see paragraphs [0022] and [0023] of Sumitomo Cement KK including Table 1).

As the disclosure in Sumitomo Cement KK shows, without the reinforced layer, the high conductivity layer itself is not for practical use and makes the transparent conductive film of Sumitomo Cement KK unsatisfactory for its intended purpose. Hence, it is clear that Sumitomo Cement KK discloses a two-layered transparent conductive film which is utterly distinct from a compressed conductive layer, and the Sumitomo Cement KK’s teaching of “62.5-100 wt% of the conductive particles” cannot be combined or modified in view of Yukinobu et al. to direct to a compressed conductive layer.


Thus, for these reasons, withdrawal of this rejection is respectfully requested.

### CONCLUSION

For the foregoing reasons, all the claims now pending in the present application are believed to be clearly patentable over the outstanding rejections. Accordingly, favorable reconsideration of the claims in light of the above remarks is courteously solicited. If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

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Respectfully submitted,

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